

37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

In the Specification:

Please substitute the Abstract on page 55 with the following Abstract:

Abstract

B¹
Disclosed are novel parathyroid hormone (PTH) peptide derivatives. In particular, the invention relates to PTH derivatives having amino acid substitutions that confer PTH-1/PTH-2 receptor agonist or antagonist properties to the derivatives. Also disclosed are methods of preparing these novel derivatives, and methods of using these derivatives to treat mammalian conditions.

In the Claims:

Please cancel claims 1, 7 and 9-29 without prejudice to or disclaimer of the subject matter therein.

Please substitute the following claim 2 for the pending claim 2:

B²
sub C1
2. (Once amended) An isolated biologically active peptide consisting essentially of the formula:

- (a) X₀₁ ValSerGluIleGlnLeuMetHisAsnLeuGlyLysHisLeuAsnSerMet
GluArgValGluTrpLeuArgLysLysLeuGlnAspValHisAsnPhe (SEQ
ID NO:1);
- (b) fragments thereof containing amino acids 1-29, 1-30, 1-31, 1-32,
or 1-33;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof;

wherein:

X₀₁ is desamino Ser, desamino Ala or desamino Gly,
provided that said peptide is not (desamino-Ser¹)hPTH(1-31)NH₂ or (desamino-
Ser¹)hPTH(1-34)NH₂.

32
Cont
[Please substitute the following claim 3 for the pending claim 3:]

2
7. (Once amended) The peptide of claim 1 which is:
desamino-AlaValSerGluIleGlnLeuMetHisAsnLeuGlyLysHisLeuAsnSerMetGluArgVal
GluTrpLeuArgLysLysLeuGlnAspValHisAsnPhe (SEQ ID NO:5).

3
4. (Once amended) The peptide of claim 1 which is:

3
4. (Once amended) The peptide of claim 1 which is:
desamino-GlyValSerGluIleGlnLeuMetHisAsnLeuGlyLysHisLeuAsnSerMetGluArgVal
GluTrpLeuArgLysLysLeuGlnAspValHisAsnPhe (SEQ ID NO:2).

B2
Cont [Please substitute the following claim 5 for the pending claim 5:]

B3 ~~4~~ 5. (Once amended) The peptide of claim ~~4~~ wherein the peptide is labeled with a label selected from the group consisting of: radiolabel, fluorescent label, bioluminescent label, or chemiluminescent label.

[Please substitute the following claim 8 for the pending claim 8:]

~~6~~ 8. (Once amended) A pharmaceutical composition comprising an isolated biologically active peptide consisting essentially of the formula:

- (a) X₀₁ ValSerGluIleGlnLeuMetHisAsnLeuGlyLysHisLeuAsnSerMet
GluArgValGluTrpLeuArgLysLysLeuGlnAspValHisAsnPhe (SEQ
ID NO:1);
- (b) fragments thereof containing amino acids 1-29, 1-30, 1-31, 1-32,
or 1-33;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof;

wherein:

X₀₁ is desamino Ser, desamino Ala or desamino Gly; and a
pharmaceutically acceptable carrier.
